

## REMARKS

### I. Introduction

Claims 1 – 8 are pending in the present application. Applicants have amended the title to more clearly indicate the claimed invention, as requested by the Examiner. In view of the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

### II. Claim Rejections Under 35 U.S.C. § 103

Claims 1 – 8 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,836,511 to Marukawa. Applicants traverse this rejection for at least the following reasons.

Claim 1 recites, among other things, data playback equipment comprising an error detection means for detecting an error between the signal related to the output of the analog-to-digital conversion means and an output of the target holding means and generating a signal representing the error as a parameter signal correlated with an error rate of played-back data, wherein the quality of the analog signal is adjusted so that the parameter signal is minimized, to thereby optimize the margin of the error rate of played-back data. At least this feature is not taught or suggested by Marukawa.

Marukawa appears to disclose a digital signal processing apparatus for reading signals from a recording medium. As depicted in Figure 1, analog signals are read from a recording medium and fed to a low-pass filter where high frequency noises are removed and the remaining signal is released as a filtered reproduced signal. The filtered reproduced signal is then converted to a digital signal. However, analog characteristics of the low-pass filter *are not adjusted*. Accordingly, the low-pass filter may cut off necessary frequency components which

will not be revived. Thus, Marukawa, at a minimum, fails to disclose or suggest generating an error signal and adjusting the quality of the analog signal so as to minimize the error.

As each and every limitation must be disclosed or suggested by the cited prior art references in order to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 (see, M.P.E.P. § 2143.03), and Marukawa fails to teach or suggest adjusting the quality of the analog signal so that the parameter signal is minimized, to thereby optimize the margin of the error rate of played-back data, it is respectfully submitted that claim 1 is patentable over these references.

Claims 2 – 8 depend from claim 1. Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all dependent claims are also in condition for allowance.

### **III. Conclusion**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

**Application No.: 10/664,882**

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Michael E. Fogarty  
Registration No. 36,139

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 MEF:dab  
Facsimile: 202.756.8087  
**Date: April 24, 2006**

**Please recognize our Customer No. 20277  
as our correspondence address.**